

Hitting on All Twelve

by C. E. T. Scharps

SURELY an extraordinary situation has been permitted by the motor car manufacturers to exist in the automobile world. When the wires carried the alleged message of the War Industries Board that passenger car production would be ordered cut 75 per cent, there was not a peep from any of the representatives of the industry, although some one must have known what was brought out on Thursday in New York at the meeting of the National Automobile Chamber of Commerce directors, that no such statement had been made officially and that there was seemingly no basis whatsoever for it. Why in the name of common sense there was not sent broadcast at once a statement to correct this most damaging report is more than I can figure out.

This leads right back to a weakness that has been apparent in the campaign of the motor car manufacturers ever since it has been necessary to deal with the government. The side of the motor car makers has never had publicity. All that the public has learned, or rather has been told, has come from government sources. The other side of the story has not been told under Washington date lines. And this from leaders in an industry made by publicity—paid and otherwise.

There is no question that passenger car production in this country will be even further limited by the conditions surrounding materials, supplies, transportation, etc. It is a relief to know that the government has not in mind to set any fixed limit for production, especially in view of the self-sacrificing way in which the motor car makers earlier agreed to a voluntary 30 per cent reduction.

An Industry Hamstrung

GRANTED a government order effects the slaughter of the passenger motor car industry of the United States. What then? How about the "war after the war" for world commercial supremacy? Are we not out of it before the struggle starts?

In Italy the chief automobile company is richer and more powerful than ever before and has thousands of employees at work on munitions, as well as automobiles and trucks. The day the war stops all plans are laid for the production of a small car, to sell not alone in Continental Europe and South America, but in the United States, too. There are several French automobile factories which only await the end of the war to flood this country with cars marked with well known names.

There are hundreds of other plants in the Allied countries where there are thousands of workmen who must be kept employed after the war. The foreigners have learned our vaunted quantity production methods. They have the plants and they have the money. They are ready to give us battle on our own home grounds for the motor car business of the United States, to say nothing of what they have in mind for the commerce of other parts of the world.

Against them, with their resources and their new knowledge, picture our American industry. Where is it? Shut down for a year or more (who can say how many years the war will last?), it must later stagger out to do battle. Factories dismantled and production organizations dissipated (for not every motor car plant in this country can turn to motor trucks), we will enter the lists against the fresh and new giants. A fine chance! The runner who eases up in his finishing sprint finds it impossible to pick up his speed again quickly. That's the way it will be with us. We, relaxed, against them, ready and eager.

Another thing. Demobilization of our army abroad when peace comes will be a matter of months and months. It may take a year and a half; it may mean two years. And all the time that the United States is deprived of the possible mechanical services of the hundreds of thousands of men abroad the foreign factories will be working on the after-war job.

If the government is seeking to kill our chances in the after-war battle for commercial supremacy, in the automobile line at least, cutting down production to-day 20 per cent is the ideal way to do it. It will be the hamstringing of an industry, cut down from behind.

Shortage on the West Coast

INABILITY to get railroad equipment hits the Pacific Coast motor car dealer harder than it does his Eastern brother because driveways to the Pacific from the Middle Western factory points are impossible in the winter and involve so many miles of running over none-too-good surfaces as to make them inadvisable even in the summer. From a Western town I get this picture of the situation at present:

"The Ford people here have not had a half dozen cars in the last two months and are planning on going out of business. The other dealers are a little better off so far, but are expecting to be shut off entirely soon. They don't know what to do and are considerably up in the air.

"Some are making a fortune on second-hand cars, as the people in the small outlying towns are not hep to the situation and will sell their cars at a reasonable price to the city dealers, and then they take them in town and get a topnotch price for them. For instance, the second-hand 17 Fords that retailed at around \$400 then are bringing \$550 now. That makes a nice profit, and there is no service to bother with, either. Thus they buy the car at \$350 and get \$550 for them without an overhaul.

"The shipbuilding on Puget Sound, with its high wages, made a big boom in the auto business, as these birds buy cars the first thing. But now that the cars are cut off it leaves the dealers with a bigger shop and lower equipment and no business. That is an interesting situation, especially to the dealers."

Traffic Rules for Pedestrians

HOW much the pedestrian user of the streets stands in need of some of the discipline of traffic regulation to which the automobilist is accustomed from the beginning of his motoring career is proved by so small a matter as the actions of subway users at the Brooklyn Bridge entrances. Here the stairways are divided by a railing, the idea being, of course, to keep the conflicting currents of traffic moving smoothly by sending all the entering passengers down one side, so that those leaving the trains may use the other side.

This is all a matter of supposition, because the idea of "keep to the right" which is custom and instinctive with the automobilist is not at all the thought of many subways. At almost any moment of the day those going downstairs will find themselves obstructed by persons toiling upward. Impatient of following a crowd up the proper stairway, these folks worm their way up the wrong side, unmindful of the discomfort they are causing.

Yet there are folks who think the motorist is always to blame when there are accidents in the street. If pedestrians were trained to obey traffic laws as motorists are and do, accidents would be fewer.

What Coffin Has Done

I HOLD no brief for Howard Coffin, late of the Aircraft Production Board, but I do know that more than two years ago he quit his place with the Hudson Motor Car Company, and has since at his own expense labored unceasingly in the interest of the government. He was the first man, in connection with the work of the Council of National Defence, to get together statistics regarding factories available for war work. The figures he collected covered thousands of plants and constituted most valuable information.

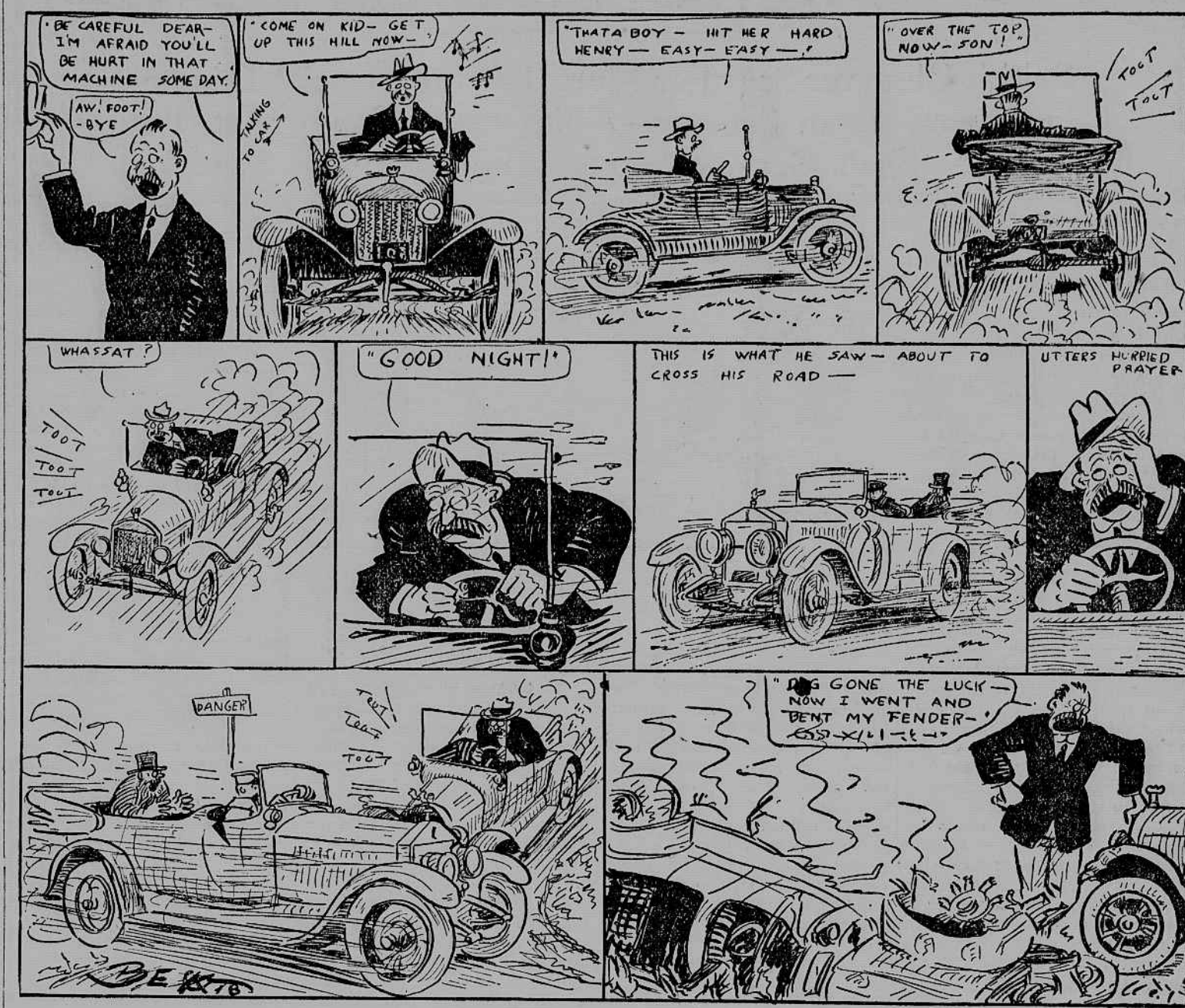
He gave his time, his energy and his best thought to the work he was set to do, and never thought of pay. Coffin is not a rich man, as some of the volunteers have been. It has cost him at least \$40,000 to serve the country as he has. And for reward apparently he is to be made the "goat" in the aircraft tangle.

Cost of Carelessness Is

Item of Car Expense
"Careful driving will greatly reduce the average driver's expense," says George Stove, president of the Mitchell Motor Car Company, of New York. "There have been some big increases in fuel and oil prices. Tires have increased in price to some extent, too. Many other things required in the operation of a car cost more than formerly, but the cost of carelessness has been and is still being materially reduced every day. Most automobiles are operated at less expense than formerly. It is probably conservative to state that from 5 to 10 per cent of the fuel used by motorists in the United States can be saved if all motorists will stop running their motors with cars standing still. This is not only an expensive practice, but it is a somewhat dangerous nuisance, and undoubtedly will be soon prohibited in all of the principal cities of the country.

The proper adjustment of carburetors will make another considerable saving, and one almost as great can be made by the careful use of foot throttle. The driver who is constantly increasing and throwing off his power undoubtedly makes the more noise, but he does not add to the comfort of his passengers by doing this. It is a pretty stiff price for his carelessness when he settles his fuel bill."

Did You Ever Know It to Fail?



The Horse Is Doing a Slight Come-Back These Days

The war has given the horse a new lease on life in the inevitably losing battle which that animal is waging to prevent the automobile from forcing him into the glass cases along with the remnants of the pterodactyl and the mastodon.

Three years ago the number of horses in America began to dwindle and last year no less a partisan of the horse than the Secretary of Agriculture said in his annual report: "Slowly but surely the automobile is driving gray horses from the city streets. Already the automobile has effectively put the driving horse off the country roads. The farm demand for several years has been the mainstay of the horse market."

But just at the moment that the automobile had the horse dangling on the ropes ready to sag under the finishing wallop, America entered the war, and under the stimulative effect of a heavy demand for cavalry horses and for increased motive power throughout the nation, he got back his wind and now is battling away with all four feet, determined to last out several more rounds.

One automobile enthusiast has pointed out that the horse eats so much that there would be an immediate demand for his destruction were it possible to replace him quickly for the work which must be done. By way of statistics this man points out that although only 60,000,000 acres of farm lands in this country are devoted to wheat growing, 41,000,000 acres are given up to oats and 54,000,000 acres to hay, two articles of diet which are essentially horsefeed.

Ninety-five million acres for horsefeed and only 60,000,000 for wheat in these times when every acre counts shows altogether too much favoritism to the horse, in this man's opinion.

Having practically smothered the horse in the field of passenger transportation, the automobile is now taking a new line of attack by making a strong bid for supremacy in the field of truck transportation.

A statistician of the United States Tire Company estimates that nearly 1,500,000 truck tires are now in use on commercial vehicles in this country. The trucks in use have already supplanted more than 1,000,000 horses, and it is safe to say that when the war is over and there is a surplusage of motive power the horse will stay and the horses will go. The same may be said of the farm tractors, which appear to be destined for an important place on the farm at the expense of the horse.

The motor truck easily demonstrates its superiority over the horse-drawn truck in the present national emergency, in which the automobile has been called on to help out the railroad. Although motor truck transportation has owed its very existence to the solid rubber tire, the truck has shown its best result in the present emergency when equipped with pneumatics—such, for instance, as the "Nobby Cord"—which make long trips at high speed possible without serious wear and tear on the car and with a great saving of gasoline.

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Brooklyn Motor Corps

The Brooklyn division of the Motor Corps of America is looking for contributions to pay for a field motor ambulance for active service. The motorists registered in Kings County are being appealed to, to send their money to Alex Schwabach, 1844 Eighty-second Street, Brooklyn, for the purpose. The motor corps is composed of volunteer women who buy their uniforms and drive their private motor cars (for whose running expense they pay in full) to transport wounded, sick, disabled or convalescent soldiers and do all manner of other services in the interest of the armed forces.

New York State Measure Should Help to End Confusion

ALBANY, May 11.—New York State has a new motor vehicle headlight law. It came into existence last Wednesday with the signature of the Governor. It is hoped the law will do away with the confusion over headlights that has existed among motorists in this state for the last year. It is expected, too, that the law will go far to remove the danger and annoyance of night driving in this state.

The law confers on the office of Secretary of State Francis M. Hugo the authority, lacking hitherto, to name officially such headlights as come within the requirements, following tests before technical experts or boards.

The new law states that any person or concern may submit to the Secretary of State a device for controlling the front lights of motor vehicles, to the end that this device shall then be submitted for a test to the United States Bureau of Standards or any other qualified testing laboratory not interested in any way in lamps or headlighting apparatus, or to a disinterested, qualified technical expert or experts from the physical laboratory of a university or technical school in this state. The fee will be \$50. The Secretary of State also has the power to test out the device on the road as he may see fit.

Following a notice from the bureau, laboratory or technical expert testing the device, to the effect that it complies with the provisions of the law and suggesting the maximum candlepower to be used with it, Secretary Hugo may then issue a certificate that the device meets with the requirements of the law and prescribing the candlepower to be used. Those dissatisfied with the results of the test have the right of appeal to the United States Bureau of Standards, whose decision shall be final. Among other new provisions of the law are:

Every motor vehicle when running shall display from one-half hour after sunset to one-half hour before sunrise at least two lighted lamps in front, of approximately equal power, but not exceeding 24 candlepower, unless a great-

Lighting-Up Time

To make the time at which drivers of all vehicles in the metropolitan district are required to show lights conform to the new daylight saving time, the law has been added to the regulation half-hour after sunset.

Today, 8:37 p. m.
Monday, May 13, 8:38 p. m.
Tuesday, May 14, 8:39 p. m.
Wednesday, May 15, 8:40 p. m.
Thursday, May 16, 8:41 p. m.
Friday, May 17, 8:42 p. m.
Saturday, May 18, 8:43 p. m.
Sunday, May 19, 8:44 p. m.
Monday, May 20, 8:45 p. m.

er power has been prescribed under one of the subdivisions of the new law. The feet, lighted lamp in the rear must be such that the numbers of the license plate are legible at least fifty feet away.

The front lights must be so adjusted and operated as to avoid dangerous glare or dazzle and so that no dazzling light projected to the left of the axis of the vehicle when measured 75 feet or more ahead of the lamps shall rise above 42 inches on the level surface on which the vehicle stands.

All this, however, which has been a puzzle to ninety-nine out of every one hundred motorists, will be taken care of in the tests. Lists will be furnished by Secretary Hugo, making public, as is the case in other states, the lights that come within New York's law.

The law further states that front lights are to be visible at least 250 feet in the direction in which the car is going, and when it is on a highway not well enough lighted to reveal any objects straight ahead 200 feet away such front lights shall be of sufficient intensity to reveal that object at least 200 feet away. The law, however, is not to apply to motor trucks, described in Subdivision 4 of the law.

The motor truck situation is taken care of by requiring that on motor trucks of two tons' carrying capacity or over, so constructed that they cannot exceed fifteen miles an hour, the lights shall be visible at least 200 feet, and when the vehicle is on a highway not so lighted as to reveal any object straight ahead 200 feet that the front lights shall be sufficient to disclose any object 75 feet ahead.

Motor vehicles when standing must display two lights in front and a red one in the rear visible at least 100 feet distant.

A new edition of New York State's motor vehicle laws will be off the press within a few days. Mr. Hugo is planning a widespread distribution of these booklets through automobile clubs and similar organizations. Copies may also be had on request.

11—Gasolene Transfer System

The diagram that follows is the eleventh of a series designed to be of value to automobilists to assist them in diagnosing and curing various troubles. The charts, in the main, apply to all types of cars. The plan is to publish a chart weekly until the whole field is covered.

- Pressure not maintained when engine is running.....
Filler cap or thumb screw on filler cap not tightened.
Leaking air connections.
Failure to screw in hand pump handle tightly after using.
Insufficient lubrication of air pressure pump on engine.
Air pump cylinder or piston worn or cut.
Incorrectly adjusted air pressure regulator.
Leaking air pres- [imperfect needle valve or seat, sure regulator... [dirt on needle valve or seat.
Leaking pipe.
Sharp bend or dent in air or gasolene piping.
- Low pressure indicated when engine is running.....
Causes under "A."
Pressure gauge inaccurate.
- Pressure falls off rapidly after engine stops.....
Filler cap or thumb screw on filler cap not tightened.
Leaking air connections.
Failure to screw in hand pump handle tightly after using.
Leaking check valve at pump.
Leaking air pres- [imperfect needle valve or seat, sure regulator... [dirt on needle valve or seat.
Leaking pipe.
Incorrect adjustment of air pressure regulator.
Dirt in valve guide.
Pressure gauge incorrect.
- High pressure indicated.....
Valve at tank nearly closed.
Low air pressure.
Strainer at top of tank, under front floor or at carburetor, clogged with dirt or ice.
Dirt or ice in settling chamber at bottom of gasolene tank.
Sharp bend or dent in gasolene piping.
- Insufficient flow of gasolene to carburetor.....
Of course, not ice, these days.

Are Running as if It Were War Time Over Here

Running during the night hours only, and under as near "war zone" conditions as this peaceful section of America can provide, trains of Packard army trucks destined for service with Pershing in France are pushing forward from Detroit to an Atlantic port. The convoy consists of 252 Packards, and the trains are twenty-four hours apart.

Except that they use their lights and are not bothered by sudden gusts of drafts, the trucks are running as if in the immediate neighborhood of the front. The soldier-drivers, seventy-eight men to a train, make camp by the roadside wherever dawn greets them, cooking their meals on field ranges carried in

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Motor Car Army at

Home Is Mobilizing

"Signs indicate that the mobilization of the motor car army has started," says A. M. Robbins, general manager of the Chalmers Sales Company, Inc. "Our sales of Chalmers cars are the turning up of machines of owners at the service station indicate that the summer season is to be a busy one for the automobile."

"The machines are not to be used only for touring, in the ordinary meaning of the word, but for utility purposes of every kind. "Thousands of relatives and friends of soldiers in camps miles away from New York will journey by motor car to see the boys. Motor cars will be a great aid to the railroads in relieving some of the burden of transportation of passengers and freight. The nation will profit by the use of the motor car, for touring is not only good for business reasons, but also for health, spirit and morale."

For Any of Ten Reasons, Power May Be Lacking

Study This Article and Become Familiar With the List

By William H. Stewart, Jr.

Quickly to diagnose trouble in the power plant of an automobile seems like intuition, but it is not. The person with the widest experience is most apt to locate it quickly. This is merely because he has a broad view of the subject and, like an experienced doctor, recognizes the symptoms. The inexperienced person knows only a few symptoms, and when these have been traced he is at the end of his resources. He must learn all the possible causes of the trouble in order to be able to eliminate them in proper sequence.

A decidedly baffling trouble is loss of power. The engine continues to run, but unsatisfactorily. This trouble may be studied under ten separate heads, most of them susceptible of further subdivision. It has been well said that there are only five reasons why an engine should run and several hundred why it should not. This is quite true. The five conditions necessary for an engine to run and even running at compression, carburetion, ignition, lubrication and cooling. If these five are reasonably right the engine must perform. If they are not, the engine will lose power, or even refuse to run. It is the work of a trained operator to have these conditions right at all times.

An engine develops power in direct proportion to its compression. If compression is weak power is lost. It may leak through valve plugs, spark plugs, compression cocks, gasket around cylinder head, exhaust inlet valve, scored cylinder, or past the piston rings. Leaks of this sort cause loss of power, but are seldom severe enough to stop the engine.

Next is carburetion. The slightest change in the mixture weakens the power, providing the mixture was right in the first place. This may be due to derangement of the high speed adjustment, clogging of the fuel line, float or valve troubles, all of which require the attention of one who knows.

Perhaps ignition is the most difficult subject to master. There are many places where trouble may occur—weak battery, dirty breaker points, fouled spark plugs, leaky distributor, loose wires and punctured or leaky condenser, all have their part, and must be considered while searching for trouble.

Lubrication is for the purpose of reducing friction. Power is lost rapidly if lubrication is neglected. The pump may fail, the pipes become clogged, the oil may be low, may need changing, or may be of a poor grade. Then, again, it may be spoiled by the gasoline leaking down past the pistons. Any of these will reduce the power.

Keeping the engine down to its proper working temperature is the function of the cooling system. If the temperature runs too far, the oil burns, friction is increased, and loss of power results. Failure of the water pump, leakage, clogged radiator or pipes, slipping fan belt, scum or sediment in the water jackets, and, strangely enough, frozen radiator (Not right now.—Ed.) are the usual causes of overheating. Some are easily remedied, while others require a mechanic's attention.

But there are other causes of loss of power.

After every ten private cars there will be five taxicabs let into the line. These figures are subject to change according to the needs of the situation. The numbers issued will be large ones, to hang over the water cap, and thus will be readily identified.

General Francis V. Greene, in whose police commissionership traffic regulation was started; Sophie Irene Leach, William P. Eno and others also spoke at the meeting.

Don't "Dig Your Own Grave" When in a Hole

"Digging one's own grave" covers a practice which can only result from a lack of knowledge of the correct manner of getting traction from tires. Most people do not know that the slower a wheel revolves the more

traction it has. Nine owners out of ten when stuck in the mud will put their cars in low gear and then race their motors for dear life, shortening the life of both tire and motor. When this fails they use second speed. With the wheel going at such a pace it is impossible for the wheels to get any traction, even if straws or twigs are placed beneath them, and in snow, or ice even, tire chains will be slipped around idly.

The effect is usually to dig a deep hole, into which the wheel sinks, thereby by only increasing the difficulty. Some owners in this predicament will continue the silly racing of motors, now backing and now trying to go forward, some one less technical and more philosophical will have to explain.

Now, assuming one to be in a place with no traction, clear away any stones, large sticks or other solid impediments, lay straw, twigs or other similar material—the English always carry a strip of chicken wire for awkward situations—in front of the wheel which is in the slipping, and put the car in low. Speed your motor only sufficiently to take the clutch without stalling. Then cautiously slow down the engine until either one of two things happens: viz., the car moves or the engine stalls.

If the engine stalls, start it again and begin all over. If the car starts, repress the impulse to step on the accelerator. Keep the engine turning slowly. If the engine stalls when you are half way out of the hole, be ready with your brake; put your hand back on the clutch, or, if possible, or better yet, have some one behind with a block or brick to block the wheel against slipping back.

If the brake is used to hold the car, which will be the case if alone, do not release it before engaging the clutch when you try again. The engine has power enough to turn the wheel slowly, even if the brake is on. As soon as it has taken hold, release the brake.

Repetition of this process will get a man out of a bog if anything on earth will.—B. F. Goodrich Rubber Co.

Taylor Takes on Signal For New Motor Truck Line

R. E. Taylor is back in the motor truck business in New York. He is head of the Automotive Sales Corporation, at Seventh Avenue and Fifty-second Street. Rather, that is where his place of business will be when completed. His temporary offices are at 177 Broadway.

Taylor will handle the Signal truck, in models from one to five tons. The territory is New York (city and state), Pennsylvania, New Jersey, Maryland, Delaware, District of Columbia and Western Connecticut. He also has the export rights to the truck.

Punch Card Plan To Save Delays In Traffic Court

Police Commissioner Harris Announces Several New Plans of Regulation

Dr. John A. Harris, special deputy police commissioner in charge of traffic, was an interesting speaker at the meeting of the Highway Traffic Association at the Automobile Club of America on Friday night. He told the members of several plans of traffic regulation that indicate an earnest and intelligent study of the situation.

Against them, with their resources and their new knowledge, picture our American industry. Where is it? Shut down for a year or more (who can say how many years the war will last?), it must later stagger out to do battle. Factories dismantled and production organizations dissipated (for not every motor car plant in this country can turn to motor trucks), we will enter the lists against the fresh and new giants. A fine chance! The runner who eases up in his finishing sprint finds it impossible to pick up his speed again quickly. That's the way it will be with us. We, relaxed, against them, ready and eager.

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Incorrect adjustment of air pressure regulator.
Dirt in valve guide.
Pressure gauge incorrect.
- High pressure indicated.....
Valve at tank nearly closed.
Low air pressure.
Strainer at top of tank, under front floor or at carburetor, clogged with dirt or ice.
Dirt or ice in settling chamber at bottom of gasolene tank.
Sharp bend or dent in gasolene piping.
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